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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,432

01/28/2005

Shozo Ichikawa

A3-043 US

1260

7590

10/21/2005

Robert J Zeitler
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Lisle, IL 60532

EXAMINER

IMAS, VLADIMIR

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/523,432	Applicant(s) ICHIKAWA ET AL.	
	Examiner Vladimir Imas	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-10, 12, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Komatsu (US 4,854,895).

Regarding Claim 1, Komatsu discloses an electrical connector Fig. 1-10 comprising: a shield case 21 for covering an insulative housing 11 mounting a plurality of terminals 13, each of the terminals having a contact piece 13a and a terminal piece 13b, at least a portion of the terminal piece extending from the insulative housing in a direction away from the contact piece, the terminal piece being capable of being connected to an electric wire 15 of a cable 14; an over-molding portion 31 for securing the shield case along with the cable to shape the electrical connector; the shield casing having a tube-like 21a portion engaging with a portion of the insulative housing and a box-like 21b portion internally receiving at least a portion of the terminal piece and the electrical wire of the cable; the tube-like portion and the box-like portion being connected via a continuous piece 21c, the tube-like portion including a bending piece 24 externally projecting from an edge of the tube-like portion, the continuous piece and the bending piece being embedded in the over-molding portion.

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FIG. 1

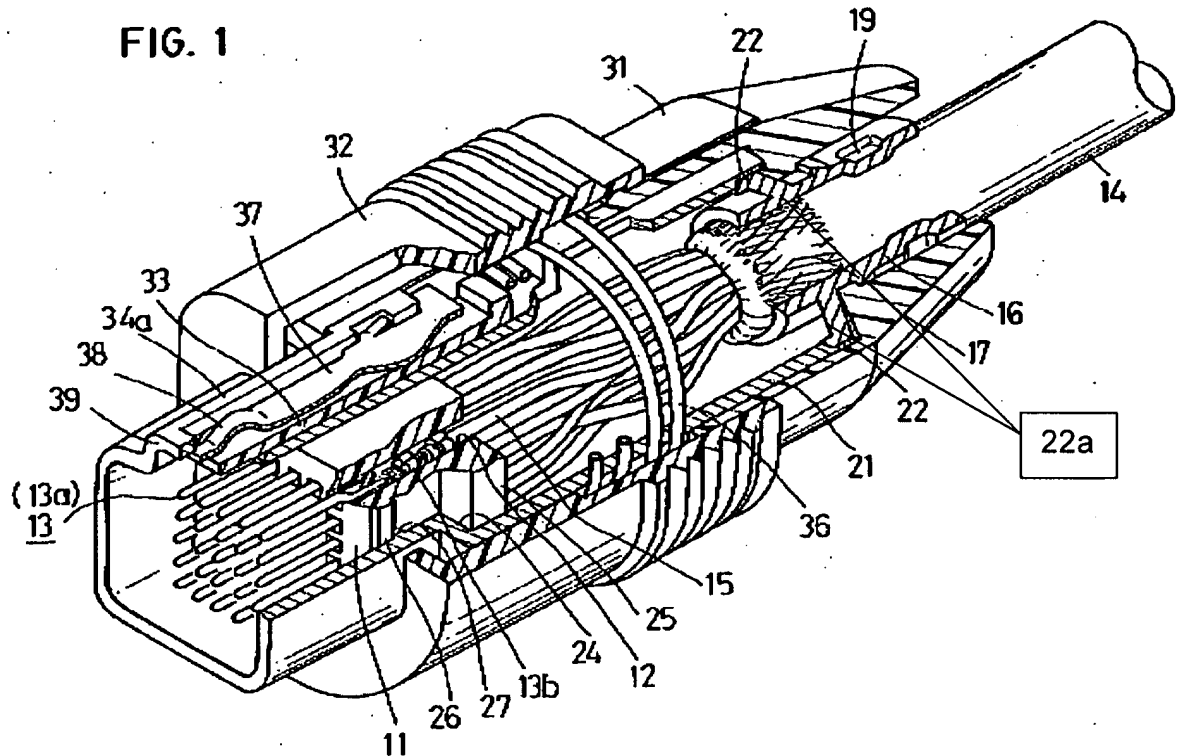
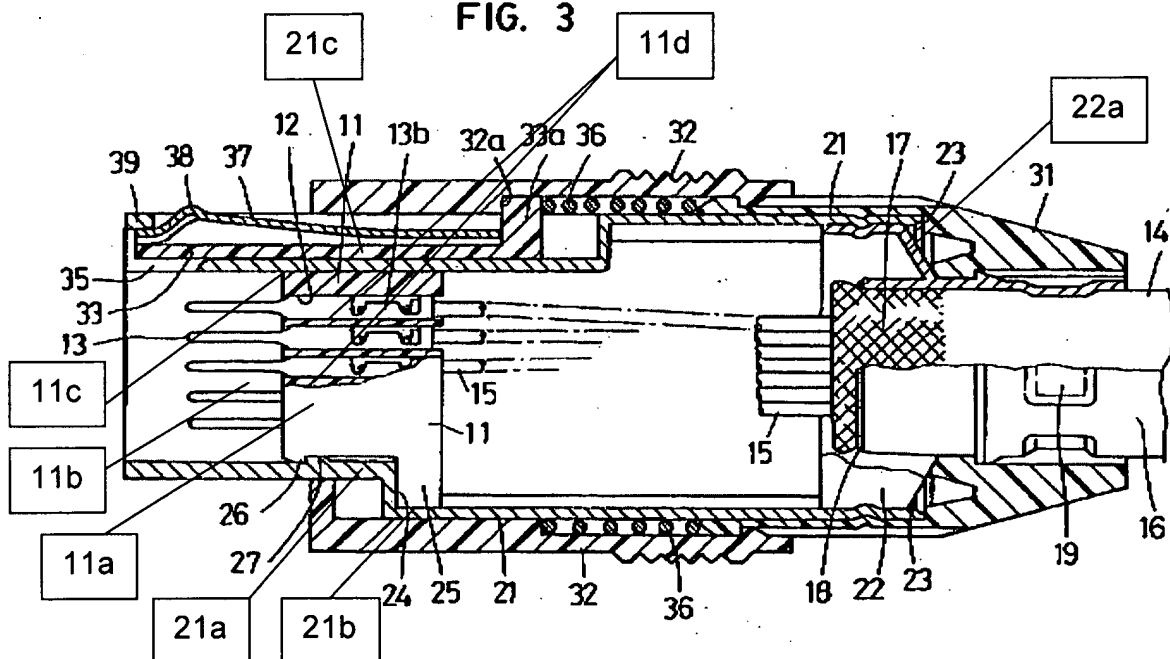


FIG. 3



Regarding Claim 2, Komatsu discloses an electrical connector as set forth in claim 1, wherein the tube-like portion is a quadrangular tube-like portion, wherein one wall being continuous with the box-like portion via the continuous piece, and three walls being provided projecting the bending piece.

Regarding Claim 3, Komatsu discloses an electrical connector as set forth in claim 1 or 2, wherein the continuous piece is bended to make the center of the quadrangular tube-like portion substantially consistent with that of the box-like portion.

Regarding Claim 5, Komatsu discloses an electrical connector as set forth in claim 1, comprising: a shield cap 22 mounted on the shield body 21, a strip tab 23 extending from the box-like portion, an end portion of the strip tab being provided with a cable clamp 16, a depending piece extending from the shield cap, and a cable holder 19 being provided at the end portion of the depending piece, and the cable clamp commonly clamping the cable and the cable holder.

Regarding Claim 6, Komatsu discloses an electrical connector as set forth in claim 5, wherein the shield cap is formed with a quadrangular plate 22a smaller than an opening portion of the box-like portion, bent continuous pieces extending from an upper edge and a side edge of the quadrangular plate, and the depending piece depending from a lower edge of the quadrangular piece, and a gap being formed between the upper connecting piece and the lateral connecting pieces, and between the depending piece and the lateral connecting pieces.

Regarding Claim 7, Komatsu discloses an electrical connector as set forth in

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claim 6, wherein the quadrangular plate of the shield cap, the continuous pieces and the depending piece closes the end opening portion formed in the box-like portion of the shield body.

Regarding Claim 8, Komatsu discloses an electrical connector as set forth in any one of claims 5 to 7. wherein the tube-like portion and the box-like portion are continuous via the continuous piece, a bending piece extends externally from the end edge of the tube-like portion, the continuous piece and the bending piece are embedded in the over-molding portion and resins of the bending portion and the over-molding portion are engaged.

Regarding Claim 9, Komatsu discloses an electrical connector as set forth in claim 8, wherein the tube-like portion is a quadrangular tube-like portion wherein one wall being continuous with the box-like portion via the continuous piece, and three walls being provided projecting the bending piece.

Regarding Claim 10, Komatsu discloses an electrical connector as set forth in claim 8, wherein the continuous piece is bended to make the center of the quadrangular tube-like portion substantially consistent with that of the box-like portion.

Regarding Claim 12, Komatsu discloses an electrical connector as set forth in claim 1, wherein the insulative housing includes a housing body 11a formed with terminal receiving spaces 11b, and a housing cap 25 formed with terminal insertion holes 12; rear end opening portions of the terminal receiving spaces formed in the housing body being sealed by the housing cap; and terminal pieces of the terminals

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mounted in the terminal receiving spaces rearwardly extending through the terminal insertion holes of the housing cap.

Regarding Claim 14, Komatsu discloses an electrical connector as set forth in claim 12, wherein the housing cap includes a supporting surface 11c for supporting terminal pieces rearwardly exposing through the terminal insertion holes.

Regarding Claim 15, Komatsu discloses an electrical connector as set forth in claim 1, wherein the supporting surface includes separation projections 11d for isolating adjacent terminal pieces.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu in view of Fujiura (US 4,838,808).

Regarding Claims 4 and 11, Komatsu discloses all limitations except electrical connector is formed into a L-shape configuration in which the direction of extension of the cable is intersected with the direction of extension of a mating end of the insulative housing surrounded by the shield case at approximately right angle. Fujiura discloses electrical connector is formed into a L-shape configuration in which the direction of extension of the cable is intersected with the direction of extension of a mating end of the insulative housing surrounded by the shield case at approximately right angle.

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At the time the invention was made, it would have been to a person of ordinary skill in the art to implement Fujiura 's external design for Komatsu's connector to provide angled position between direction of extension of the cable and direction of extension of a mating end of the insulative housing.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Komatsu in view of Geyer et al. (DE 29709031 U1).

Regarding Claim 13, Komatsu discloses all limitations except the rear end opening portions of the terminal receiving spaces are sealed by abutting the abutting surface against the rear end surface. Geyer et al. discloses receiving spaces are sealed by abutting the abutting surface against the rear end surface. At the time the invention was made, it would have been to a person of ordinary skill in the art to overmold wires in the receiving spaces of Komatsu's connector as taught by Geyer et al. for better protection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vladimir Imas whose telephone number is 571-272-8288. The examiner can normally be reached on 8:00 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T. Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.


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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VI

Examiner
Vladimir Imas
10/18/2005


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SUPERVISORY PATENT EXAMINER

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